REMARKS

In the present application, claims 1-14 are pending. Claims 1-4, 8, 9, 11, and 12 are rejected. Claims 5-7, 10, 13 and 14 are allowed. Claims 1-14 are believed to be in condition for allowance.

Claim Rejections – 35 USC § 103

The Examiner rejected claims 1-4, 8-9, and 11-12 as being unpatentable over Wu et al. (US 2003/0072278) in view of Suzuki et al. (US 2003/0014705 A1). The Examiner noted that "Wu fails to teach the detecting a case where no base station is transmitting to the user equipment UE, the inserting predetermined values into an output of a UE receiver, and decoding the predetermined values." The Examiner then asserted that "(Suzuki) teaches these features [the detecting of packet loss in 802, Fig. 6, for the no response from transmitting station, base station, in abstract; the inserting of "00", 8053, at the output 206 of system receiver decoder 205, due to packet loss in the receiving signal, Fig. 16, abstract, paragraph 0078]; the decoding the predetermined values [the application decoder 209 for decoding the inserted predetermined values [the application decoder 209 for decoding the inserted predetermined value, to detect transmission error [Fig. 17, abstract], in order to prevent the synchronization problem in decoder, for detecting transmission error. Therefore, it would have been obvious ... to modify Wu with Suzuki's inserting of "00" at the receiver output, system decoder 205, in order to prevent error in the decoder."

In the Response to Arguments section of the present office action, the Examiner asserted that "Suzuki teaches that the missing packet is detected in 802 of the received data at mobile telephone from server [Fig. 6/Fig. 17, abstract; server in paragraph 0002-0004], & the 802 detects the packet data is not received yet [paragraph 0066], which is equivalent to the detecting of no base station transmitting, due to no data received yet at mobile telephone."

Claim 1 recites:

1. A method to operate user equipment (UE) in a Site Selection Diversity Transmit mode, comprising:

detecting a case where no base station is transmitting to the UE;

inserting predetermined values into an output of a UE receiver; and

decoding the predetermined values.

Applicant respectfully disagrees with the Examiner's characterization of the teachings of Suzuki. Applicant further asserts that neither Wu nor Suzuki teach or otherwise suggest "detecting a case where no base station is transmitting to the UE" as recited. Specifically, the Examiner is in error when citing paragraph [0066] of Suzuki and asserting that "the 802 detects the packet data is not received yet [paragraph 0066], which is equivalent to the detecting of no base station transmitting, due to no data received yet at mobile telephone". The detection of an as yet not received packet is most emphatically not equivalent to the detecting of no base station transmitting.

First, as clearly stated in the Abstract of Suzuki, "...packet loss occurs during **transmission** of mobile communication of digital data ...According to the present invention, a data string not contained in specification and standards of the application decoder is inserted to a section with packet loss of the received data by system decoder, and the application decoder can explicitly judge from the data string that communication error has occurred is. As a result, the **application decoder can detect accurate position of transmission error**. Also, by arranging the data string to be inserted between the system decoder and the application decoder, the position of the error can be detected more accurately." (emphasis added). It is evident that Suzuki teaches packet loss during a transmission. It is not uncommon during a packet based transmission for errors to occur. In fact, the bit error rate (BER) refers specifically to this phenomenon and, as noted in one on-line glossary of technical terms, "In telecommunication transmission, the bit error rate (BER) is the percentage of bits that have errors relative to the total number of bits received **in a transmission**, usually expressed as ten to a negative power." (emphasis added). It is therefore evident that the communication error detected by Suzuki occurs during a transmission, that is, when a base station is transmitting.

Second, turning to the Examiners citation, paragraph [0066] recites:

> In this connection, description will be given below on a method to control the acknowledgment process on the terminal side. More concretely, the retransmission judgment unit 304 and the packet loss detection unit 802 shown in FIG. 6 are utilized. The packet data processing unit 301 analyzes error detection information contained in the header part of each TCP packet and delivers an error detection result 302 to the retransmission judgment unit 304. In this case, if the received packet contains an error, the packet is cancelled. On the other hand, in case the received packet does not contain an error, TCP packet is analyzed, and the payload data 307 and the sequence number 801 (there is no payload type in TCP) are outputted to the media data reconstruction unit 308. At the same time, the sequence number 801 is outputted to the packet loss detection unit 802. In so doing, by analyzing the sequence number at the packet loss detection unit 802, it is possible to detect the packet which is not received yet. More concretely, if sequence number of a packet has not arrived from the packet data processing unit 301, it is judged that it is a packet not yet received. At the packet loss detection unit 802, **if a packet is not received yet after a predetermined time (controlled by the system decoder) has elapsed although the packets before and after it have been received, it is regarded as a loss packet**, and its sequence number 807 is delivered to the retransmission judgment unit 304. (emphasis added).

As is clear, when Suzuki refers to a packet that "is not received yet", the not received packet is but one packet among many, including "the packets before and after it" forming a transmission. Contrary to the Examiner's assertion, such a not yet received packet is not "due to no data received yet at the mobile telephone" and is not equivalent to "the detecting of no base station transmitting." Rather, according to Suzuki, the not yet received packet is proof positive of a transmission. Therefore, contrary to the Examiner's assertions, Suzuki does not teach "detecting a case where no base station is transmitting to the UE" as claimed.

Furthermore, as previously argued, Suzuki teaches, in general, inserting a data string not contained in the specification and standards of an application decoder into a section of received digital media data with packet loss. The data string is inserted into the output of the system decoder and the resulting digital data media is outputted to the application decoder. The inserted data string is of a size equal to that of a missing packet. As a result, the application decoder can accurately detect the position of a **transmission error** in the received digital media data by identifying the inserted data string. As Suzuki explicitly states in the Abstract, "packet loss occurs during **transmission** of mobile communication of digital data".

(emphasis added). Further, as a result of the invention, Suzuki states that "the application decoder can detect accurate position of **transmission error**." (emphasis added).

At paragraph [0061] Suzuki teaches:

> In case the protocol of the transport layer is UDP-RTP, error detection information contained in a header part of each UDP packet is analyzed. If the received packet contains an error, the packet is discarded at the packet data processing unit 301. **RTP packet** corresponds to a payload of UDP packet, and it **comprises RTP header containing payload data, sequence number and payload type information**. For this reason, even when a packet transmitted later has arrived earlier at the receiver, it can be rearranged in the order of transmission by the media data reconstruction unit 308 of the system decoder. In case the received UDP packet does not contain error, RTP packet is analyzed, and a payload data 307 and a time-stamp--sequence number--payload type 801 are outputted to the media data reconstruction unit 308. In this case, the time-stamp--sequence number--payload type 801 is also outputted to a packet loss detection unit 802. **As a result, by analyzing the sequence number and the payload type at the packet loss detection unit 802, it is possible to detect the packet data not arrived yet and the packet data with a transmission error for each payload type**. More concretely, even when it is the time to output data from the media data reconstruction unit 308, it is possible to judge from sequence number and payload type that the packet not arrived yet at the packet loss detection unit 802 is a loss packet.

As is evident, Suzuki is directed to detecting packet loss arising from a transmission error. In the embodiments presented, Suzuki is directed to detecting and addressing missing packets (or packets containing errors) from amongst a plurality of packets that were correctly received from a transmission. As noted, Suzuki determines if a packet is missing by analyzing the sequence number of the received packets. As Suzuki makes clear, it teachings are directed to manipulating packets received from a transmission. It is the receipt of at least one such packet, forming part of a transmission, that forms the predicate for Suzuki's data string insertion. As a result, Suzuki makes no mention of "detecting a case where no base station is **transmitting** to the UE" as recited.

Furthermore, claim 1 recites "inserting predetermined values into an output of a UE receiver; and decoding the predetermined values". As noted above, Suzuki teaches inserting the data string into the output of the system decoder and outputting the resulting digital data

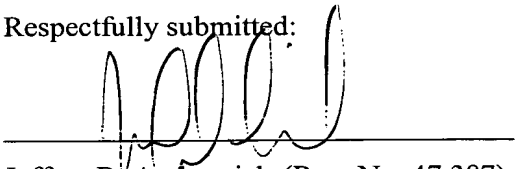
media to the application decoder. Therefore, Suzuki teaches inserting predetermined values into an output of the system decoder, not the output of a UE receiver as claimed.

It is therefore clear that Suzuki fails to teach "detecting a case where no base station is transmitting to the UE" and "inserting predetermined values into an output of a UE receiver; and decoding the predetermined values" as recited. Applicants further agree with the Examiner that, "Wu fails to teach the detecting a case where no base station is transmitting to the user equipment UE, the inserting predetermined values into an output of a UE receiver, and decoding the predetermined values." As neither Wu nor Suzuki teach this element individually, their combination, such a combination neither suggested nor deemed appropriate, likewise fails to teach this element of claim 1. Claim 1 is therefore in condition for allowance. As both independent claims 8 and 11 recite a similar limitation, for the reasons discussed above, they are likewise in condition for allowance. As all of claims 2-4, 9, and 12 depend upon claims 1, 8, and 11, they are likewise in condition for allowance.

An earnest and thorough attempt has been made by the undersigned to resolve the outstanding issues in this case and place same in condition for allowance. If the Examiner has any questions or feels that a telephone or personal interview would be helpful in resolving any outstanding issues which remain in this application after consideration of this amendment, the Examiner is courteously invited to telephone the undersigned and the same would be gratefully appreciated.

It is submitted that the claims herein patentably define over the art relied on by the Examiner and early allowance of same is courteously solicited.

Respectfully submitted:



14 Dec 06

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